

## WHAT IS CLAIMED IS:

SUB B1

1. A computer-based method for centralized collection of geographically distributed information from at least one user at a remote site computer, comprising:

- receiving data from the at least one user with the remote site computer;
- checking the data for validity with the remote site computer;
- providing the user an opportunity to correct any invalid data found during the checking;
- transmitting the data to a centralized computer over a transmission medium;
- receiving and validating the data from the remote site computer at the centralized computer, including comparing the data to data already stored at the centralized computer to determine if it is valid or invalid;
- if the data from the remote site computer is determined to be invalid, then performing the following until all data is determined to be valid:
  - signaling with the centralized computer to the remote site computer to provide the user an opportunity to correct invalid data;
  - transmitting corrected data from the remote site computer to the centralized computer; and
  - receiving and validating the corrected data from the remote site computer at the centralized computer, including comparing the corrected data to data already stored at the centralized computer to determine if the data is valid or invalid;
- when all data has been determined to be valid, then entering and storing the valid data in a central database at the centralized computer.

2. The method according to claim 1, wherein the receiving data from the at least one user with the remote site computer comprises displaying a form having fields to the user into which the data is entered field by field;

wherein the checking the data for validity with the remote site computer comprises checking the data as it is entered in a field by the user; and

wherein the providing the user an opportunity to correct any invalid data found during the checking comprises signaling the user that data entered in a field may be invalid.

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3. The method according to claim 2, wherein the checking the data for validity with the remote site computer comprises checking the data after data has been entered by the user into all fields of the form.

4. The method according to claim 1, wherein the transmitting the data to a centralized computer over a transmission medium comprises:

    sending the data from the remote site computer to the centralized computer via the internet.

5. The method according to claim 1, wherein the method further comprises:

    establishing a connection between the remote site computer and the centralized computer via the internet using a browser having interface filter plug-ins.

6. The method according to claim 5, wherein the interface filter plug-ins provide the checking the data for validity with the remote site computer.

7. The method according to claim 5, wherein the receiving and validating the data from the remote site computer to determine if the data is valid or invalid is performed using interface filter scripts.

8. The method according to claim 5, wherein the remote site computer and the centralized computer are programmed to perform the method using a programming language optimized for use with the browser, suitable for interactive applications, platform independent, relatively concise and downloadable through a browser.

9. The method according to claim 8, wherein the programming language comprises JAVA ®.

10. The method according to claim 1, wherein the geographically distributed data is data obtained during a clinical trial.

SUB B2

~~11.~~ A computer-based system to gather, transmit and store geographically distributed information comprising:

input means for entry of information at a remote site;

an information center having receiving means for receiving and storing the information;

transmission means for transmitting the entered information to the receiving means from the remote site input means;

first verification means at the remote site for verifying the information for accuracy as the information is being entered with the input means; and

second verification means at the information center for verifying the information received from the remote site input means by comparing the information with information previously stored at the information center.

<sup>13</sup>  
~~12.~~ The apparatus of claim <sup>12</sup>~~11~~, wherein said input means at said remote site comprises a computer having data entry means for entering data, a central processing means for processing data, and a display means for displaying data.

<sup>14</sup>  
~~13.~~ The apparatus of claim <sup>13</sup>~~12~~, wherein the transmission means comprises a browser running in the computer.

<sup>15</sup>  
~~14.~~ The apparatus of claim <sup>14</sup>~~13~~, wherein the receiving means for receiving and storing the information comprises a server including a database and a database management system.

<sup>16</sup>  
~~15.~~ The apparatus of claim <sup>15</sup>~~14~~, wherein the transmission means further comprises a wide area network connecting the server and the computer.

<sup>17</sup>  
~~16.~~ The apparatus of claim <sup>16</sup>~~15~~, wherein the wide area network comprises the internet including the world wide web.

<sup>18</sup>  
~~17.~~ The apparatus of claim <sup>12</sup>~~16~~, wherein the first verification means comprises an interface plug-in including a filter.

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<sup>19</sup>  
~~18.~~ The apparatus of claim <sup>12</sup>~~11~~, wherein second verification means at the information center comprises an interface filter including a script to verify new information against stored information.

<sup>21</sup>  
~~19.~~ The apparatus of claim <sup>12</sup>~~11~~, further including security means for insuring the integrity of the information that is transmitted and that is stored.

<sup>22</sup>  
~~20.~~ The apparatus of claim <sup>12</sup>~~11~~, wherein the computer-based system is controlled by an interactive programming language software installed at the information center and accessible by the remote site.

<sup>23</sup>  
~~21.~~ The apparatus of claim <sup>22</sup>~~20~~, wherein said interactive programming language comprises the Java® programming language.

<sup>20</sup>  
~~22.~~ The apparatus of claim <sup>19</sup>~~18~~, wherein said script comprises Java Script®.

*Sub A-L*  
~~23.~~ A computer system for the centralized collection of geographically distributed information, comprising:  
a remote site computer having a browser with a first data verification module for verifying data entered at the remote site computer;  
a transmission medium coupled to the remote site computer; and  
a central computer coupled to the transmission medium, and having a database and a second data verification module for verifying data received from the remote site computer.

<sup>26</sup>  
~~24.~~ The computer system according to claim <sup>25</sup>~~23~~, further comprising a plurality of remote site computers, each having a browser with a first data verification module for verifying data entered at the respective remote site computer, and each remote site computer being coupled to the transmission medium.

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